MINUTES

CALIFORNIA BIODIVERSITY COUNCIL STATEWIDE MEETING LOS ANGELES, CA JUNE 20 & 21, 2001

CBC Members Present:

Mary Nichols, California Resources Agency *Iim Abbott. Bureau of Land Management* Eileen Ansari, Southern California Association of Governments Alexander Glazer, University of California Jerry Harmon, San Diego Association of Governments Nancy Huffman, Northern California County Supervisors Association Beth Jines, California Environmental Protection Agency David G. Linnebur, US Marine Corps Rodney McInnis, National Marine Fisheries Service, NOAA Bradley Powell, USDA Forest Service H. Wes Pratt, California Conservation Corps Chuck Raysbrook, California Department of Fish and Game James Shevock, National Park Service Michael V. Shulters, US Geological Survey Deborah Smith, Los Angeles Regional Water Quality Control Board Chuck Solomon, US Bureau of Reclamation Alexis Strauss, US Environmental Protection Agency Andrea Tuttle, California Department of Forestry and Fire Protection Al Wright, Wildlife Conservation Board Mary Wright, California Department of Parks and Recreation Darryl Young, California Department of Conservation

Secretary Mary Nichols called the meeting to order at 8:35am, Thursday, June 21, 2001. She first introduced Mark Pisano, Executive Director of the Southern California Association of Governments. Mr. Pisano said a few words of welcome to the Council. He wanted to share a couple experiences that have occurred in the past several years. The areas of growth – there have been tremendous political battles on growth, housing, transportation, and air quality conformity. Underpinning it all is the fact that that we began to understand and we took action.

First, SCAG reduced the size of their planning region by one million people and they shifted the growth within the region. Those shifts of growth within their region – less employment in the west (more in the east), less population and housing on the east – these shifts were fairly sizable. There were 500,000 less jobs in LA County, 250,000 less jobs in Orange County, and so on. Those shifts did more to reduce emissions in transportation/air quality conformity than any other strategy.

There is a growing understanding within the elected officials on SCAG's board, that in fact you can manage growth and through that management and taking active land-use

positions, you can have a substantial impact on our physical environment. Mr. Pisano's second observation was that to truly understand the culture of Southern California you must understand that not only do we have a sense that "growth, growth, growth" are the first three words that come out of our mouths, but also that "community, community, community" are the next three words. Identification within the local community is extremely important and even within the City of Los Angeles we have seen a decentralization by trust occurring. This led SCAG to create 14 sub-regions in their management area and each sub-region has 15-25 elected officials sitting on their board. Each sub-region has undertaken rather pro-active and aggressive steps towards land-use actions that relate to the issue of biodiversity. Initiatives like the community acceptability process and the community economic and transportation accessibility process are occurring sub-region by sub-region. SCAG's role as the regional agency for these sub-regions is to piece all of those communities together. They have an Open Space Plan through GAP analysis identifies areas of sensitive biodiversity. SCAG has a database of GIS layers posted on the Internet and this database is most likely the best in the nation as to determining what information individuals need in order to manage their environment and manage environmental justice issues. The population diversity is only exceeded by the diversity of the bioregion. And the diversity of the South Coast region of California is nationally bested only by Hawaii.

Mr. Pisano is seeking political leadership on specific issues – we need political leaders and community leaders that are will to support the actions that administrative organizations and governmental organizations, like the Biodiversity Council, take. Mr. Pisano thanked Secretary Nichols in addition to thanking the Council for coming to Southern California.

Council Introductions and Announcements

- Eileen Ansari (SCAG) noted that in the Four Corners region of the LA Basin a Boy Scout Reservation stands as one of the last pieces of open space. Recently, the Reservation was purchased by the City of Industry, which is now planning to build a reservoir on that location. Ms. Ansari noted her displeasure at the project and hopes that the area can be preserved and kept part of the wildlife corridor.
- Mary Wright (Chief Deputy Director, California State Parks) is quite encouraged by the opportunity to participate and bring State Parks closer to the people of Southern California. Based on the number of questions that Ms. Wright received during the field trip, it is apparent that the role of State Parks is unclear to most folks. She encouraged the group to stop by the State Parks display and learn about some of the historic and long standing parks in Southern California as well as the role that Parks hopes to play in the near future as it relates to the LA River Parkway Project, the Cornfields, Taylor Yards, and others that will be further explored in the panel discussions today. Ms. Wright also announced that she will retire from 28 years of State service at the end of this month. Her replacement for representation on the Council will be Dick Troy, Deputy Director for Park Operations.
- Jerry Harmon (SANDAG) has had a chance living in Southern California for the last fifty years to see significant changes in the area. It is refreshing to see

the reclamation of what was a concrete river into something that will be more natural. San Diego looks forward to the results that Los Angeles is making and hope that it will set an example for others to follow.

- Brad Powell (Regional Forester, US Forest Service) wanted to update the
 Council on the management plan the Forest Service has for it's four southern
 California National Forests encompassing over 2 million acres: the Angeles,
 Cleveland, San Bernardino, and the Los Padres. US Forest Service (FS) is
 currently in the process of revising those four forest plans and also revising
 the Forest Plan regulations. The next two years will include rounds of public
 meetings completed with an EIS for the regulations. Mr. Powell encouraged
 the individuals in attendance to be sure that they're agencies have an
 opportunity to interact with the FS in this process.
 - Mark Pisano wanted to thank the Forest Service and to let the group know that the FS staff person who helped prepare the Open Space element of SCAG's Comprehensive Plan for the past two years.
- Col Dave Linnebur (US Marine Corps) announced that Col Joe Wendel would serve as his replacement during an extended detail in Washington, DC.
- Andrea Tuttle (Director, CA Department of Forestry and Fire Protection) noted that CDF has quite a presence in Southern California mainly fire protection in cooperation with the Forest Service, counties and other local cooperators. Additionally, there are many Fire Safe Councils in this area of the State, which are one of the great ways for neighbors, individuals and agencies to get together to provide fuel management programs and fire safety for communities. One piece that is often forgotten about CDF in Southern California is their Urban Forestry program. CDF administers grant funds from various sources and provides technical assistance for non-profits. The CDF website also has a dichotomous key that allows you to determine the appropriate tree species to plant in your neighborhood allowing for variables like temperature and shade among others.
- Wes Pratt (Director, California Conservation Corps) announced the upcoming 25th Anniversary Celebration of the CCC. The Corps will be celebrating at the State Capital in Sacramento at noon on Wednesday, July 11. At the beginning of July, the Corps will be distributing approximately 35,000 to 50,000 CFL light bulbs to working class families.

Executive Committee Report: Christine Nota, USDA Forest Service Chris noted that this is her first report as Chair of the Committee.

• Financial Report - Dues are still being collected from the 2000-2001 Fiscal Year. Erin Klaesius will be preparing a year-end report as soon as all of the details are relayed from UC Berkeley. The good news is that there is room in the budget to finance a Tenth Anniversary Celebration for the Council in October of this year.

- 2002 Meeting Strategic Planning In April the Executive Committee met to plan the out-year quarterly meetings for the Council, paying particular attention to bioregions that may not be receiving enough attention. Additionally, the Committee discussed what they would like to achieve in each of those potential locations. A proposed list of 2002 locations is available as a handout and the themes for each location are still quite flexible.
 - o March 2002 Colorado Desert Bioregion, Yuma, Arizona
 - June 2002 Modoc Bioregion, Alturas
 - September 2002 Central Coast Bioregion, Santa Cruz
 - November 2002 South Coast Bioregion, Pasadena with the California State Association of Counties. Possible Inclusion could be a field trip/meeting to the Santa Ana watershed basin.

Anyone with suggestions for meeting locations should feel free to contact Chris (<u>cnota@fs.fed.us</u>) or Erin Klaesius (<u>erin_klaesius@fire.ca.gov</u>). The themes are very much open for discussion.

 There is a hand out available detailing the recent work of the CBC's Watershed Work Group. The group will be meeting in Davis on July 13, 2001. Please contact Maria Rea or Renée Hoyos of the Resources Agency with any questions. Both Maria and Renée can be reached at 916.653.5656.

Field Trip Report: Stanley Young, Resources Agency

Stanley noted that the Council members had already mentioned most of the highlights of the field trip yesterday. Stanley thanked Kathleen Bullard and the Santa Monica Mountains Conservancy for their efforts in coordinating the bulk of the afternoon. The Council group first traveled to the Elysian Park overlook, at which they could view downtown Los Angeles, the confluence of the Los Angeles River, as well as the Chinatown Cornfields. Kathleen Bullard (Santa Monica Mountains Conservancy), Lynne Dwyer (North East Trees), Arthur Golding (Los Angeles River Task Force of the American Institute of Architects), and Robert Garcia (Center for Law in the Public Interest) were on hand to answer questions. The group then headed back down to the Chinatown Cornfields where Arthur Golding, Lewis McAdams (Friends of the Los Angeles River), and Robert Garcia explained the current situation regarding this last piece of open space in downtown Los Angeles.

The remainder of the trip included a narrated drive up through the Arroyo Seco Parkway and a hike through the Arroyo to the back entrance of the Pasadena Rose Bowl led by Tim Brick, Founder of the Arroyo Seco Foundation.

Stanley was delighted that we were able to share some of the beauty as well as some of the problems in the Los Angeles basin.

After a coffee break, Secretary Nichols resumed the morning's sessions by introducing the moderator for the morning panel titled: Beyond the Fragmented Metropolis, Linkages within a Global Hotspot.

Beyond the Fragmented Metropolis, Linkages within a Global Hotspot

Four major habitat linkages have been identified in LA County that include the Santa Monica, Santa Susanna, Los Padres, San Gabriel, and Verdugo Mountains, the San Gabriel River and the Whittier/Puente Hills. The panel will discuss these current efforts, as well as the principles of protecting native habitat and species populations through landscape linkages.

Claire Schlotterbeck (President, Hills for Everyone) moderated the session and began with a brief discussion of her experiences in the Los Angeles basin. Claire noted that almost of all of the audience lives in the California Floristic Province, one of the twenty global hotspots for biodiversity. In the southern portion of that province you find that the coastal sage scrub is the most species rich habitat in the continental United States. Additionally, the coastal sage scrub is one of the fastest disappearing ecosystems in the world.

Dr. Sanjayan (Director of Science for The Nature Conservancy) spoke about the field of conservation biology and it's role in Southern California. Historically, the first notion of the importance of corridors came from MacArthur and Wilson who said roughly that big habitat means more species and when the habitat patch is closer to another habitat patch you will again have more species by increasingly the colonization rate. Additionally, although these protected lands have been shown statistically as quite important, it has also been shown that these lands are not sufficient. They are too small, too fragmented, too isolated and are often not in the correct location.

Sanjayan discussed the changing level of permeability in California or the ability of plants and animals to move throughout the state. The species in question and the type of development restricting movement determine the level of permeability. Another conservation topic discussed was meso-predator release. A study looked at canyons in San Diego, noted that when the canyons became isolated they could not find ground-nesting birds, songbirds, or ground rodents. These canyons, surrounded by houses, tend to keep out most of the large predators. The small predators, or meso-predators, like possums and foxes flourish and then decimate the populations of birds and rodents. This was an unusual and unexpected result of development.

Wildlife corridors must be evaluated in terms of context, not content. Although corridors have an intrinsic habitat value, their salient feature is that they connect to possibly larger habitat areas. It is difficult to judge a corridor by acres, as a small acre property can be incredibly valuable to the health of local wildlife populations. Wildlife corridors also play a quite large role in the health of plant species as over 60% of trees and woody shrubs are dispersed by animals.

Councilman Bob Henderson of Whittier spoke next about his battles for the environment in the political realm and especially those in preservation of the Whittier/Puente/Chino Hills. In 1978, an issue came up and started galvanizing the Whittier area around preservation of local hillside areas. Those hills had remained open primarily because of oil exploration, but in that year, there was a move to start developing those hills. This triggered a lot of folks who wanted to preserve their beautiful, hillside backdrop and quickly initiated a referendum

and subsequently passed it through a vicious political battle against the developers. Three years later, the development idea came back and the City of Whittier modified their General Plan to protect against further development applications.

Later, in 1990, Chevron Oil secretly circulated a proposal that included transforming one of their large land holdings from an oil development complex to rows upon rows of houses. This would close over 550 oil wells. The proposal was eventually blocked, mainly due to several key elections that changed the composition of the City Council members.

Although, most of this activity was based on the desire for aesthetic value with little consideration to habitat and wildlife, these lands were still protected.

In 1992, Proposition A brought a tremendous amount of money to environmental policy; the City of Whittier received \$17 million to begin buying up the treasured hillside. At this point, Whittier began collaborating with neighboring cities to protect the area as a whole. They formed a Joint Powers Authority consisting of four cities and three states agencies with the purpose of beginning to plan for areas that are within each city's sphere of influence, but not necessarily incorporated as of yet. An additional goal was to find ways to prioritize land acquisitions. In doing this, these cities realized that they needed to study the biology, ecology, and biodiversity of the areas as well.

Today, the investments made in the area exceed \$200 million of public money. A major political achievement is that they have been able to show the local taxpayer the advantage of saving this open space. It is important to explain that this has an ultimately positive impact on the land's property value.

Paul Edelman (Chief of Planning and Natural Resources, Santa Monica Mountains Conservancy) discussed the problems of establishing linkages in developed areas and his attempts to connect the Verdugo Mountains, the Tujunga Wash, and the San Gabriel Mountains. This area is 22 square miles and lies just a short distance from the Angeles National Forest and the Tujunga Wash. The Big Tujunga Wash is a near optimal landscape linkage to bring animals like the lions, badgers, and bobcats in the area down to the Verdugo Mountains and back up as well.

Power corridors, although they are not wide, are at least contiguous. They present a great opportunity, planning-wise, to take advantage of preserved land that can be accessed for free in most situations. In this scenario, there are only two roadways to cross when following the power corridor: Sunland Boulevard and Wentworth Avenue.

Mr. Edelman emphasized a few points for folks attempting to preserve open space. You can do a lot of planning and devote a lot of time to assembling the perfect corridor, but the key thing to do, initially, is to buy the land and to buy the existing underpasses and overpasses. It is important to put your resources into these two basic activities because the development of these places is irreversible.

Dr. Ray Sauvajot (Chief of Planning, Science, and Resource Management; Santa Monica Mts. NRA, NPS) discussed the scientific studies occurring tracking the movement of animals in the Santa Monica Mountains. Dr. Sauvajot helps design wildlife studies, provides information to park rangers and the public, and often works with other scientists studying park wildlife.

Dr. Sauvajot has instituted various studies of wildlife in the basin area. They use several methods, including track plates and radio telemetry to study a variety of animals including coyotes, foxes and the 150 or so bobcats that inhabit the 60-to 65-square-mile portion of the Santa Monica Mountains National Recreation Area in and around Los Angeles. "We have lots of bobcats living within the city limits of Los Angeles," says Ray Sauvajot. "And they aren't just visitors. They establish home ranges, set up dens, produce young and catch whatever prey they need." Other communities with bobcats at their edge include Malibu, Thousand Oaks and Agoura Hills.

Los Angeles residents (the human type) often spot bobcats while walking in the city's brushy canyons. And one female feline raised her young in a hillside den that overlooked a major freeway intersection. "These bobcats are quietly coexisting with millions of people and tolerating the hustle and bustle of Los Angeles," says Sauvajot. "It's amazing."

Ray also noted that the photo and track plate systems that the Park Service works with indicates time on the photo. They know when animals use each corridor and approach each plate. The majority of encounters have occurred at night.

The Park Service also monitors human use, although finding a correlation between human and animal use is quite a difficult task – many confounding factors exist. For example, the areas in which human interaction is most likely are usually more developed and therefore have less quality habitat for animals to frequent. For the radio telemetry data, NPS has analyzed animals that are so-called "urban-associated animals," like bobcats, coyotes, and foxes that generally frequent more populated areas. They shift their activity to more night use whereas in a more natural area they may make use of the habitat more often during the day.

Secretary Nichols and Ms. Schlotterbeck moderated a discussion between the audience, panelists, and Council members before the scheduled lunch break In closing, Ms. Schlotterbeck urged that people currently living in rural or semirural areas to plan for habitat and protected lands now. It is imperative to protect spaces before it becomes impossibly costly.

CCRISP Update

California Continuing Resources Investment Strategy Program

Madelyn Glickfeld gave a brief update of the current status of the CCRISP program. Since the last report to the CBC, Madelyn has been appointed as an Assistant Secretary for the Resources Agency (RA). Additionally, Madelyn took this opportunity to introduce two new members of the CCRISP staff. Heather Barnett has accepted a position as Outreach Coordinator for CCRISP. Heather recently received her Master's degree in Planning at UCLA and will take a year off before law school to entertain this position with the Resources Agency. Sandra Hamlet, a Sustainable Conservation Leadership Program intern for the RA, will be working on assessing the status of information on conservation easements held by the State and mitigation lands held by non-conservation state agencies.

CCRISP has been working very closely with the National Center for Environmental Analysis and Synthesis (NCEAS) to develop a methodology. CCRISP has put out its first report (as requested by the legislature) on *Identifying Statewide Conservation Priorities*. The report is available on the RA website as well as the CBC website. The second report, on key data needs, assesses the strengths and weaknesses of key data sets on conservation planning. Nineteen public agencies (14 state agencies, four federal agencies, CALFED) have all collaborated to produce an analysis of the legal mandates of the key agencies that do land acquisitions, management, and stewardship. All in all, CCRISP has prepared a draft Conservation Audit Methodology.

A website for CCRISP will be available on August 1 at the following site: http://ccrisp.ca.gov.

New Perspectives on Urban Parks and Landscapes

Joan Hartmann is the Public Outreach Coordinator for the Southern California Wetlands Recovery Project and began the afternoon session with a quick introduction of the topic at hand. On behalf of the panel, she welcomed the members of the Council to Los Angeles and indicated that they were all very gratified in the interest shown to urban parks.

Los Angeles has the smallest number of parks of any major urban center in the nation. This is more than a "quality of life" issue. It has had a deep corrosive impact on the city's social fabric. The members of this panel have pioneered some incredibly innovative strategies – both in how to change your missions and behavior and also how to bring new constituencies into the process of natural resource decision-making. Ms. Hartmann will ask each member, in turn, How do bureaucracies change? What strategies or techniques have they used to shift agencies missions to better address issues related to urban open space?

Robert Garcia is the Director of The City Project for the Center for Law in the Public Interest. The Center for Law in the Public Interest (CLIPI) is a Los Angeles-based organization and The City Project seeks equal justice, democracy, and livability for all people in the greater LA area. Robert Garcia elected to answer the question posed by Ms. Hartmann by using the Chinatown Cornfield as a case study. The Cornfield is the last, vast open space in greater Los Angeles and was slated to become 32 acres of warehouses for the Majestic Realty Corporation. Now, after 18 months, there is \$40

million in the state budget to buy the site and to make it into a park. Robert is working with the City of Los Angeles and Majestic Realty. Robert used three key strategies to get to where he is today in protecting the Cornfield:

1. Coalition Building

In the cornfield, they put together one of the strongest, broadest, and most diverse coalitions ever created behind any issue. It includes the traditional environmental groups (Natural Resources DC, the Sierra Club, Environmental Defense, and others), civil rights groups (Mexican-American Legal Defense Fund, CLIPI), community-based organizations (Concerned Citizens of South Central Los Angeles), and business interests (Chinese Consolidated Benevolence Association). Putting together this coalition and serving the needs of the community as defined the community was key.

2. Strategic Advocacy

In September of 2000, CLIPI persuaded every major candidate for Mayor of Los Angeles to endorse a park in the cornfield. They additionally persuaded the Los Angeles Times to write a series of passionate editorials, which were very important in galvanizing public support. They persuaded Cardinal Mahoney to write letters of support.

3. Impact Litigation

Also in September of 2000, CLIPI submitted administrative charges to Secretary Andrew Cuomo of the Department of Housing and Urban Development because Majestic Realty was seeking federal subsidies to make the cornfields deal profitable for Majestic to build warehouses. They submitted the charges on both civil rights and environmental grounds. This persuaded Andrew Cuomo to withhold all federal funding to Majestic. An additional factor in this ruling was the CEQA (California Environmental Quality Act) suit also filed by CLIPI.

These three tools have been essential to the success of the cornfield. These tools are also at work in other areas like Baldwin Hills and have worked in previous cases.

CLIPI's ultimate goal is to follow the money. They figure out who benefits from public investments. The type of information that they gather in publicize includes:

- Environmental quality aspects of parks
 Los Angeles is park poor and has the least acreage of parks per thousand residents than any other American city.
- Environmental justice or civil rights aspects of parks
 There are also vast disparities in access to parks and recreation in LA. In the inner city, there are 0.3 acres of parks per thousand residents as compared to 1.7 acres in disproportionately white, relatively wealthy parts of LA.

CLIPI confronts the legacy of environmental degradation in communities of color, communities of color being systematically denied the benefits of public works projects with significant environmental implications, and that communities are systematically excluded from the decision-making process.

Steve Treanor, Division Chief of Los Angeles for California State Parks, spoke next. As a self-proclaimed agency representative and career bureaucrat, noted that in response to Robert's work with CLIPI – they are doing exactly what they intended and changing the agencies' perspective on parks and landscapes in an urban setting. In terms of changing the agency perspective, Steve looks inward to his agency – State Parks. This organization tends to be thought of with mostly a rural influence. But, Mr. Treanor wants to share information with the folks in his agency. There are 34 million people in California today and that will expand to 50 million by the year 2025. The US Census says that 90% of CA is currently urban (1,000 people per square mile). Over 31% of Californians speak a language other than English. 363 California cities report gang problems and nearly 25% of the children are living below poverty levels. California has an average of 217.2 persons per square mile, while the national average is 79 per square mile. This all means that regardless of where you live in California, you will be dealing with urban pressures and populations.

Recently, State Parks brought all of their superintendents from all the park districts in California to Los Angeles. They showed folks where resources are going – imagine the Superintendent of the North Coast Redwoods who can buy 100 acres of prime resource land for \$1 million – but he sees resources going to Southern California where land is \$1 million per single acre. This recreates internal agency strife; by bringing everyone to Los Angeles, they demystified this fact and showed them what's possible for the urban community.

For State Parks it was important to collect this data, share it within the agency, and then begin to apply to peoples hearts to gain commitment in the agency for important issues. With that process, it's important to figure out how to measure success and recognize it when they see it. With the celebration of success comes commitment. One measure of success happens to be in the Baldwin Hills. The discussion of a power plant on these lands created very contentious meetings about issues very important to a lot of people. Steve was gratified, when as an agency representative; citizens of the community approached him and recognized him as one of the good guys. This becomes a measure of success.

Jody Cook is the Supervisor for the Angeles National Forest and spoke further on the topic of how agencies can reinvent themselves to deal with urban challenges. Jody wanted to set the context for this unique National Forest. The forest encompasses approximately 690,000 acres in the hills above Burbank and Pasadena. The Angeles represents 24 per cent of the land base in Los Angeles County and it is 72 per cent of all the open space in the county. This forest was established back in 1891 as the San Gabriel Timberland Reserve. Aside from the effects of wildfire and flood control projects, the ecosystem of the Angeles remains virtually the same as the day it was initially protected over 100 years ago. When it comes to this National Forest, it truly is an island of green in a sea of humanity. They are within a one-hour drive of a 25 million people population base. Last year, there were 30 million visitor contacts on the Angeles and this is by far the most heavily used National Forest in the nation. The challenge is and will continue to be the ever-increasing demand of public use with conservation of the natural resources and biodiversity. Additionally, Jody works to find ways to connect people to the land. When citizens do use these islands of greens, they

need to understand and value why it's important to conserve natural resources and use them wisely.

Rudy Retamoza, also with the Angeles National Forest, manages the GreenLink Program for the US Forest Service. In 1992, the civil unrest in LA redirected his work to urban forests. The program began after a series of community-sensing meetings in downtown Los Angeles. Out of these meetings, they created a framework to respond to some of these important issues. The Framework included several emphasis areas:

- Building Community Capacity
 - "Serving People" by investing in community leadership and youth in non-traditional areas of Los Angeles
- Environmental Education
 - "Sowing the Seeds of Change"
 - Increasing the awareness of young people throughout the area of their choices in terms of the environment. Do they want an environment infested with thistles, rats, and nettles or an environment of rich biodiversity that comes with connected openspace?
- Biomass Utilization
 - o "Rethink Reduce, Reuse...then Recycle."
 - The intent is to reduce the amount of green space entering land fills in the area.
- Recreation
 - "From Urban Places to Mountain Spaces"
 - GreenLink is reaching out to include the non-traditional public in their programs, policies and decision-making throughout the basin
- Watershed Management
 - "Caring for the Land"
 - This includes both fire and resource management on the national forests
- Infrastructure
 - o "Building Bridges for the Future"
 - GreenLink sponsored a project with the CA Conservation Corps to construct recycling centers, which were included in some of the highuse areas of the National Forests.

The intent of the program is to create a stronger link between the four southern California National Forests and the urban communities in the LA Basin and throughout Southern California. They pilot programs that bridge the inner-city areas with the forests. It is important to understand that people are a significant component of the ecosystems in Los Angeles area. GreenLink provides multi-cultural programming for the underserved population of the Los Angeles basin and providing access to public lands for the inner-city population.

Andy Lipkis, the founding Executive Director of TreePeople spoke about his work as the first "citizen forester." TreePeople is a premier organization serving Los Angeles for the past 27 years. Over the years, Andy has developed a host of tremendously successful, innovative programs that take broken, fragmented systems and begin to

knit them back together. Recently, Andy has been promoting T.R.E.E.S., TransAgency Resources for Environmental and Economic Sustainability. This has been a staggeringly successful program in re-shaping agency behavior.

Some of the underlying challenges of "how do we get green, open space; how do we restore biodiversity and life?" Today, Los Angeles is managed in different pieces of infrastructure each of which is managed by a different agency. Flood control, water supply, economic development, energy, air quality, sanitation are all running on different but parallel tracks. We have dis-integrated the ecosystem and in doing so, we have lost the opportunity to manage for life, biodiversity, and the whole. We have stopped valuing things for what they should be valued – cities and people lose, and nature loses.

The challenge is to bring all of those issues together and manage the whole. Andy felt that we can avoid the litigation route and with agencies we can recognize that they do need to be involved. In trying to get LA managed as a whole ecosystem, TreePeople knew that they needed to get all of these agencies together to manage the system. The resources for protection are available, but when the citizens and the agencies don't work together those resources are deeply damaged.

Los Angeles was built with little understanding and appreciation for the power and function of nature and its cycles. A great city was created in a beautiful environment - at tremendous cost to the environment and frequently to the people who lived here. More importantly, the cost of fighting nature to keep Los Angeles functioning continues to take a heavy toll on the economy, ecosystem and people-in terms of health, safety and opportunity. We have interfered with the natural cycles of energy and water with thousands of square miles of concrete and asphalt.

In this system, rainfall is channelled to our roadways, where it picks up oil, asbestos, pesticides, animal wastes and a toxic soup of other pollutants, and washes into the over-taxed storm drain system and out to our beaches and bays. In this system where well over 60% of the city's surface is covered with pavement, very little of the sun's energy is absorbed by vegetation, but instead heats up the pavement, and then the air, needlessly overtaxing air conditioners that must struggle against this excess heat at huge costs-costs in terms of dollars, extra fuel burned at power plants, and extra air pollution from those power plants. In this system yard waste never gets the chance to return to the soil but is, instead, shipped to landfills where it constitutes 30% of the waste stream. And in this system vast quantities of water are imported from distant states to irrigate our lawns, while the 15 inches of rain that falls on our city every year, an amount that if it were captured could meet more than half of our city's annual need, disappears down our street drains; handled in this way, as a nuisance rather than a resource, almost none of the rain water that falls on our city is available to replenish our groundwater.

Yet we spend hundreds of millions of dollars on massive flood control projects that are, in part, caused by our wasteful attitude towards the rain that can and should refresh our soil. To deal with these problems and the other ills of modern urban lifelike closing landfills, air pollution, energy waste, and unemployment-we have created massive bureaucracies, all working hard, but independent of one another.

With the TREES project, Andy brought together a bunch of agencies and instead of looking for private supporters; he involved the agencies in investing in the research. Beginning with the US Forest Service, a half dozen agencies came on line to design an integrated program that they would all be a part of and consequently, they *all* had a stake in the process. T.R.E.E.S. (with the help of the nation's urban planners and engineers) developed Best Management Practices for five urban sites: a residential home, apartment building, public site, commercial area, and an industrial site. The water saving devices include cisterns, swales, dry wells and, of course, trees. To prove a project's retrofit makes economic sense, we also developed an interactive computer program to conduct cost-benefit analyses. Ownership is a key factor for change. Andy also pointed out that it is important to:

- Support the agencies through the process as these changes are made, lots
 of things can make this unsafe for an agency. Every agency is held
 accountable for their actions.
- Giving credit and recognizing people within the agency

But even harder than interagency coordination is the moxie to commit today's money for tomorrow's benefits. Mr. Lipkis approached Carl Blum, deputy director with the Los Angeles County Department of Public Works, about the TREES project. Carl felt that this project could engender the necessary agency support.

The Upper Sun Valley Watershed, an 8-mile long watershed with an 8,000-home community, has a flooding problem. The county has a \$40 million storm drain solution. But Mr. Blum said that he wanted the T.R.E.E.S. concept, which so far has looked only at individual sites, applied on a larger scale. Although it would cost more, there would be a slough of additional benefits. A storm drain would only solve the problem, but the TREES project is a more sustainable approach that would benefit water, poolution, and parks. This project is the first piece of a very large puzzle to retrofit the entire country's urban infrastructure.

Again, the key to putting the puzzle together is to create incentives that encourage voluntary participation. Incentives come from appreciating the long-term economic benefits, successful demonstrations like the Open Charter Magnet School, and building on the success of larger projects such as the Upper Sun Valley Watershed retrofit. Sustainable development is not a new concept, but T.R.E.E.S. demonstrates the economic advantages when agencies coordinate their efforts and pool their resources. Andy encourages sustainability advocates to not take political sides, but rather to engage everyone along the political spectrum. "The earth, our soil, is our support system," he says. "When we work from battle mode, we all lose."